Introduction

1. The open-ended working group is mandated to substantively address concrete effective legal measures, legal provisions and norms that would need to be concluded to attain and maintain a world without nuclear weapons, and also to substantively address recommendations on other measures that could contribute to taking forward multilateral nuclear disarmament negotiations. Since the conclusion of the Treaty on the Non-Proliferation of Nuclear Weapon (NPT) in 1968, various legal and other measures have been proposed to advance nuclear disarmament, and their respective advantages and shortcomings have been widely studied, discussed and debated in many settings.

2. This paper seeks to analyze and compare a range of such measures not on the basis of their inherent qualities or drawbacks, but purely in empirical and pragmatic terms as pathways for moving forward. That is, the paper considers to what extent progress on a given measure is possible in the current political and diplomatic environment, assuming that the official positions of States are based on genuine considerations of national security and international stability, and are therefore unlikely to change in the short term.

1 Established pursuant to resolution 70/33 of the General Assembly of the United Nations.
II. Legal measures

Treaty on the Non-Proliferation of Nuclear Weapon (NPT)

3. Article VI of the NPT is the main existing legal foundation for nuclear disarmament. It requires NPT States parties to "pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament". Such negotiations could in principle be established through the NPT review process, which by tradition operates on consensus (although voting is theoretically possible). Agreement of the five NPT nuclear-weapon States is therefore required for the pursuit of specific disarmament actions through the NPT, unless the consensus tradition is ignored. As a nuclear disarmament measure, therefore, the NPT is currently blocked by nuclear-armed States.

Comprehensive Nuclear-Test-Ban Treaty (CTBT)

4. The CTBT was opened for signature in 1996, but is yet to enter into force as ratifications from eight States listed in Annex 2 of the treaty are still required. Its entry into force requires the agreement of all nuclear-armed States (and others). It is currently blocked by six nuclear-armed States (and two non-nuclear-armed States).

Fissile Material Cut-off Treaty (FMCT)

5. Commonly regarded as a major necessary component in a "step-by-step" approach to nuclear disarmament, negotiation of a treaty controlling fissile material has been on the agenda of the Conference on Disarmament (CD) for many years, but consensus has never been reached to begin negotiations. An FMCT would require the agreement and participation of at least some nuclear-armed States, but not necessarily all of them. As long as it is pursued in the Conference on Disarmament or other consensus-based setting, it is blocked by at least one nuclear-armed State. It could perhaps be negotiated elsewhere if several nuclear-armed States were prepared to proceed without one or two others.

Legally-binding negative security assurances

6. While several nuclear-armed States offer unilateral non-legally-binding negative security assurances (with various degrees of qualification), negotiation of a system of legally-binding assurances has been on the agenda of the Conference on Disarmament for many years, but consensus has never been reached to begin negotiations. Such a measure obviously requires the participation and agreement of the nuclear-armed States; currently it is blocked by several.

Comprehensive nuclear weapons convention

7. A comprehensive nuclear weapons convention, setting out general obligations, prohibitions and an effective basis for time-bound, irreversible and verifiable nuclear disarmament (analogous to the Chemical Weapons Convention), has been proposed by various States and civil society organizations, and is the officially preferred option of the Non-aligned Movement. The Conference on Disarmament has never reached consensus to begin negotiations on such a convention. While such a convention could in theory be negotiated without the participation of the nuclear-armed States, in practical terms this
would make little sense, and would probably be technically futile, to attempt to negotiate
detailed disarmament and verification provisions without the involvement of any of the
States to which these provisions would apply. A comprehensive nuclear weapons
convention is therefore in all practical terms blocked by nuclear-armed States.

**Convention prohibiting use of nuclear weapons**

8. A convention which prohibits only the use of nuclear weapons, not their
development or possession, has been proposed by at least one nuclear-armed State as an
interim measure pending the negotiation of a comprehensive nuclear weapons convention.
The idea has not been taken up by other nuclear-armed States. Given that a prohibition on
use would apply principally to States which possess nuclear weapons, involvement of (at
least a substantial proportion of) the nuclear-armed States would be required for this
measure. It is currently blocked by several nuclear-armed States.

**Treaty banning nuclear weapons**

9. Some States and a number of civil society organizations (most prominently the
International Campaign to Abolish Nuclear Weapons, ICAN) have proposed a treaty which
would establish the key prohibitions necessary for the pursuit, achievement and
maintenance of a world free of nuclear weapons, but which need not include detailed
disarmament and verification provisions (although it would presumably have to specify the
conditions under which nuclear-armed States could join)\(^2\). Agreement and participation of
the nuclear-armed States would not be necessary for the negotiation of such a treaty.
Negotiations could therefore commence – in a United Nations setting or elsewhere – as
soon as a sufficient number of non-nuclear-weapon States decided to do so.

**Framework convention**

10. An option that has been discussed hypothetically rather than formally proposed,
a framework convention would provide a legal structure and perhaps timetable for a set of
mutually supporting instruments aimed at achieving and maintaining a world free of
nuclear weapons. These would work in concert to establish the key prohibitions, obligations
and arrangements for the achievement and maintenance of a world free of nuclear weapons\(^3\).
Involvement of the nuclear-armed States would perhaps not be required for the negotiation
of the framework itself, but would be necessary for various of the component instruments.
This need not stop the development of the framework, however, and the measure could be
pursued by a sufficient number of non-nuclear-weapon States, in a United Nations setting
or elsewhere.

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\(^2\) For further details of a treaty banning nuclear weapons, see
NPT/CONF.2015/PC.III/WP.18, annex II.

\(^3\) For further details of a framework convention, see NPT/CONF.2015/PC.III/WP.18,
annex III.
III. Other measures

Unilateral and/or bilateral stockpile reductions

11. Further bilateral reductions between the United States of America and the Russian Federation, although supported in principle by both sides, do not appear likely given the various conditions attached. None of the other NPT nuclear-weapon States have plans to reduce their stockpiles; on the contrary, all five NPT nuclear-weapon States have plans of various kinds to modernize and renew their arsenals. None of the nuclear-armed States outside the NPT has shown any indication or readiness to reduce its stockpiles. As a disarmament measure, therefore, stockpile reduction is currently blocked by all nuclear-armed States.

De-alerting

12. Various approaches to de-alerting, or measures to reduce the operational readiness of nuclear weapons, have been proposed by a number of States. Such proposals have not been taken up by nuclear-armed States, some of which argue that de-alerting would be destabilizing and thus counterproductive. De-alerting, at least in the forms that have been proposed to date, is blocked by several nuclear-armed States.

Development of verification capacity

13. It is widely recognized that whatever the eventual form and nuclear disarmament, effective verification will be both a formidable challenge and an absolute requirement for attaining and maintaining a world free of nuclear weapons. Work to examine and develop means of verification will therefore be needed well before any actual disarmament. On this basis, a number of nuclear-armed and non-nuclear-armed States have begun the International Partnership for Nuclear Disarmament Verification (IPNDV), and working discussions in this forum are scheduled to take place in 2016. This initiative could be expanded over time to include other States, and/or similar initiatives could be pursued by others.

IV. Conclusion

14. Most of the legal and other measures that have so far been proposed to attain and maintain a world without nuclear weapons are currently blocked by one or more nuclear-armed States (a table summarizing the situation is annexed). The only measures that could immediately be pursued in the current political and diplomatic environment are:

(a) A treaty banning nuclear weapons;
(b) A framework convention (but not necessarily the component instruments);
(c) Development of verification capacity.

15. These three possibilities are not mutually exclusive and could be pursued simultaneously. In particular, a treaty banning nuclear weapons could be one of the component elements of an overarching framework convention. As noted above, development of verification capacity will support any approach to disarmament, and indeed is already under way.
16. The fact that these three measures are the only ones currently open implies nothing about their intrinsic merits with respect to the other measures considered. It should not be concluded that efforts to make progress with the NPT, CTBT, FMCT, etc., should be abandoned. Indeed, any effort to pursue the open pathways should be done in such a way as to improve, or at least not damage, the prospects for progress on the other measures.
## Table summarizing nuclear disarmament pathways

<table>
<thead>
<tr>
<th>Measure</th>
<th>Requires participation/agreement of some or all nuclear-armed States</th>
<th>Current status</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPT</td>
<td>Yes</td>
<td>Blocked by nuclear-armed States</td>
<td>Assumes consensus required in NPT review process.</td>
</tr>
<tr>
<td>CTBT</td>
<td>Yes</td>
<td>Blocked by nuclear-armed States (and 2 non-nuclear-armed States)</td>
<td></td>
</tr>
<tr>
<td>FMCT</td>
<td>Yes</td>
<td>Blocked by a nuclear-armed State</td>
<td>Blocked in Conference on Disarmament; may be possible to negotiate elsewhere if not all nuclear-armed states required.</td>
</tr>
<tr>
<td>Legally-binding negative security assurances (NSAs)</td>
<td>Yes</td>
<td>Blocked by nuclear-armed States</td>
<td></td>
</tr>
<tr>
<td>Comprehensive nuclear weapons convention</td>
<td>Yes</td>
<td>Blocked by nuclear-armed States</td>
<td></td>
</tr>
<tr>
<td>Convention prohibiting use of nuclear weapons</td>
<td>Yes</td>
<td>Blocked by nuclear-armed States</td>
<td></td>
</tr>
<tr>
<td>Treaty banning nuclear weapons</td>
<td>No</td>
<td>Open</td>
<td>Could be negotiated without participation of any nuclear-armed State.</td>
</tr>
<tr>
<td>Framework convention</td>
<td>No</td>
<td>Open</td>
<td>Framework itself could be negotiated without any nuclear-armed States, but individual components may require their involvement.</td>
</tr>
<tr>
<td>Unilateral/bilateral reductions</td>
<td>Yes</td>
<td>Blocked by nuclear-armed States</td>
<td></td>
</tr>
<tr>
<td>De-alerting</td>
<td>Yes</td>
<td>Blocked by nuclear-armed States</td>
<td></td>
</tr>
<tr>
<td>Developing verification capacity</td>
<td>Yes</td>
<td>Open; started</td>
<td></td>
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</tbody>
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